



Collaborative on Health and the Environment's Fertility/Reproductive Health Working Group



E-Bulletin April 21, 2011

This e-bulletin lists news and journal articles, organizational reports, calls for proposals, upcoming events and other items related to fertility, reproductive health and the environment. E-bulletins are archived and searchable on our website:

<http://www.healthandenvironment.org/fertility>

CHE-Fertility Highlights

[Infertility Prevention](#)

March 16, 2011

A video of the American Fertility Association's presentation at the University of Maryland, Baltimore County on strategies to preserve fertility is now posted. This presentation offers young women tips on how to navigate life's challenges of career, education and family building. Infertility prevention strategies and healthy choices that can be implemented immediately are presented. Speakers include Corey Whelan, Ken Mosesian and Karin Russ.

[Planned Parenthood celebrates Earth Day](#)

April 14, 2011

In celebration of Earth Day, Planned Parenthood Federation of America, Inc. is providing each of its 813 health centers across the U.S. a Green Choices Toolkit. The Green Choices project focuses on educating patients and staff on how toxic chemicals in our daily environment can adversely affect our health, especially our reproductive health. Each of the kits contain a CD-ROM with an EH/RH 101 curriculum for staff, a poster and brochures for waiting rooms, environmental health assessment tools, environmental health information sheets on a variety of topics, a CEU curriculum for medical providers, and other useful tools.

[Submit your Visionary Ideas](#)

Deadline for comment: April 30, 2011

This is the final week to submit ideas that will help guide the direction of environmental health research. The National Institute of Environmental Health Sciences (NIEHS) is seeking input from the public as well as researchers for its new strategic plan. To get involved, submit an idea for research or nominate a workshop participant.

[Call for Abstracts: American Society of Reproductive Medicine](#)

Deadline for Submission: May 2, 2011

The ASRM is a non-profit organization whose members must demonstrate the high ethical principles of the medical profession, and evince an interest in infertility, reproductive medicine and biology. ASRM's Environmental Health Special Interest Group is soliciting abstracts on environmental contaminants and their impact on reproduction. The 67th Annual Meeting will take place in Orlando, Florida on October 15-19, 2011.

[Seminar: Food Matters- What Clinicians Need to Know About Our Food System](#)

May 14, 2011

Boston University School of Medicine

Participants will learn how to identify health impacts associated with our food system, both in terms of the human life cycle, with a focus on maternal and child health, as well as ecological health.

New Science

A sampling of new research articles that are available on-line are gleaned from [Environmental Health News](#), and presented here.

[Negative impact of endocrine-disrupting compounds on human reproductive health](#)

May, 2011

There is significant evidence that continuous and prolonged exposure to several endocrine disrupting chemicals (EDC) is a risk factor for reduced fertility and fecundity in women. There is also evidence that EDC exposure has trans-generational effects. In this systematic review, researchers evaluate the evidence for an association between EDC exposure and women's reproductive health. Associations between ED exposure and women's reproductive health are classified as fertility and fecundity, pregnancy outcomes, transgenerational exposure and effects. The current evidence is sufficient to prompt precautionary actions to protect women's reproductive health. Human Reproduction Update.

[Environment and women's reproductive health](#)

April, 2011

There is increasing concern about chemical pollutants that are able to mimic hormones, because of their structural similarity to endogenous hormones, their ability to interact with hormone transport proteins or their potential to disrupt hormone metabolic pathways. While endocrine-disrupting compounds (EDCs) may be released into the environment in different ways, the main source is industrial waste water. The authors review the current knowledge of the impact of EDCs on reproductive disorders in humans. Chemicals investigated include polychlorinated biphenyls, dioxins, polycyclic aromatic hydrocarbons, phthalates, bisphenol A, pesticides, alkylphenols and heavy metals (arsenic, cadmium, lead, mercury). Authors investigate their potential effects on sperm count and quality, testicular germ cells, male breast cancer, cryptorchidism, hypospadias, miscarriage, endometriosis, impaired fertility, irregularities of the menstrual cycle, and infertility. Reproduction, Fertility and Development.

[Developmental exposure to TCDD reduces fertility](#)

April, 2011

TCDD (2,3,7,8-tetrachlorodibenzo-p-dioxin) is a ubiquitous environmental contaminant and known endocrine disruptor. This study demonstrates reduced fertility and an increased incidence of premature birth (PTB) in F1 mice exposed in utero to TCDD as well as in three subsequent generations. Additionally mice with a history of developmental TCDD exposure exhibit an increased sensitivity to inflammation which further negatively impacted gestation length in all generations examined. Reproductive Toxicology.

[Individual exposures to drinking water trihalomethanes, low birth weight and small for gestational age risk: a prospective Kaunas cohort study](#)

April 19, 2011

THM internal dose in pregnancy varies substantially across individuals, and depends on both water THM levels and water use habits. Increased internal dose may affect fetal growth. Environmental Health Journal.

[PFOA exposures and mammary gland growth](#)

April 18, 2011

Prenatal exposure to perfluorooctanoic acid (PFOA), a ubiquitous industrial surfactant, has been reported to delay mammary gland development in female mouse offspring. This

new study demonstrates delays in mammary gland development across three generations. Chronic, low-dose PFOA exposure in drinking water was also sufficient to alter mammary morphological development in mice, at concentrations approximating those found in contaminated human water supplies. Environmental Health Perspectives.

[Prenatal exposure to air pollutants linked to behavioral problems in young children](#)

April 12, 2011

Mothers' exposure during pregnancy to pollutants created by the incomplete combustion of fossil fuels and other organic material may lead to behavioral problems in their children, according to a new study. Researchers found that children with high levels of a pollution exposure marker in their cord blood at birth had more symptoms of attention problems and anxiety/depression at ages 5 and 7 than did children with lower exposure. Environmental Health Perspectives.

[Atrazine associated with risk of small babies](#)

April 07, 2011

Researchers in France report that babies born to women who had measureable levels of atrazine and its metabolites in their urine during pregnancy were lighter, shorter and had smaller heads than babies born to women who were not exposed. The risk of fetal growth restriction was 50 percent higher among babies born to women with detectable atrazine levels. The researchers also noted a 40% increased risk of genital malformations. Environmental Health Perspectives.

[Children with higher fetal exposure to both phthalates and BPA have impaired social functioning](#)

April 07, 2011

Endocrine disrupting compounds (EDCs) are chemicals that may interfere with the body's hormones. Hormones are important to brain development and changes in levels of hormones during pregnancy might result in brain changes that could lead to altered childhood behavior. Some researchers believe that hormonal changes during pregnancy may increase the risk of autism or ADHD. This study demonstrates that children whose mothers had the highest concentrations of BPA and phthalates in the third trimester of pregnancy displayed impaired social behavior including difficult interpersonal and social awareness skills similar to those associated with ADHD and autism. NeuroToxicology.

[Triclosan: Environmental exposure, toxicity and mechanisms of action](#)

April 1, 2011

Triclosan [5-chloro-2-(2,4-dichlorophenoxy)phenol; TCS] is a broad spectrum antibacterial agent used in personal care, veterinary, industrial and household products. TCS has been detected in breast milk, urine and plasma, with levels of TCS in the blood correlating with consumer use patterns of the antimicrobial. Mammalian systemic toxicity studies indicate that TCS is neither acutely toxic, mutagenic, carcinogenic, nor a developmental toxicant. Recently, however, concern has been raised over TCS's potential for endocrine disruption, as the antimicrobial has been shown to disrupt thyroid hormone homeostasis and possibly the reproductive axis. The potential for endocrine disruption and antibiotic cross-resistance highlights the importance of the judicious use of TCS, whereby the use of TCS should be limited to applications where it has been shown to be effective. Journal of Applied Toxicology.

Newsire and Useful Resources

Below you will find recent news, science, and other resources, gleaned from the [CHE Fertility Online Library](#), hosted by [Environmental Health News](#), and the [CHE daily news feed](#).

[Grandsons may be affected by old pregnancy drug](#)

April 21, 2011

Four decades after doctors realized that a drug called DES - used to prevent pregnancy complications - had devastating consequences for babies, a new study finds those effects may be reverberating into the third generation. Reuters.

[Studies link low IQ to prenatal pesticide exposure](#)

April 21, 2011

High levels of pesticide exposure in pregnant women have been linked to lower IQs in their children, according to three separate US studies. Agence France-Presse.

[ADHD risk may rise as pregnancy length falls](#)

April 20, 2011

Children born prematurely appear more likely to be diagnosed with ADHD. But now researchers have established that a greater risk exists even for babies born moderately early - and that the size of the risk is associated with the level of prematurity. Los Angeles Times, California. [Registration Required]

[Mother's diet 'can make kids fat'](#)

April 19, 2011

A mother's diet during pregnancy can alter the DNA of her child and increase the risk of obesity, a new study finds. It showed eating a lot of carbohydrate changed bits of DNA. It then showed children with these changes were fatter. BBC.

[Do flame retardants save enough lives to justify their damage?](#)

April 18, 2011

If California state Senator Mark Leno has his way, the state's textile and furniture manufacturers, and thus probably all such makers in the U.S., will drastically alter the amount of flame retardant carried in almost every sofa, love seat and easy chair in the country. Scientific American.

[Bryan-College Station birth defect cluster cause for concern](#)

April 18, 2011

A confirmed cluster of birth defects in Bryan-College Station has been recognized by the Texas Department of State Health Services and is being investigated by the agency and, separately, by professors at Texas A&M University. Bryan College Station Eagle, Texas.

[Encinitas development brings pesticide worries](#)

April 16, 2011

A development company that is turning the site of a former greenhouse into 19 single-family homes potentially exposed the surrounding neighborhood to dust containing the banned pesticide Dieldrin. San Diego Union-Tribune, California.

[Earliest intervention](#)

April 15, 2011

Young Maryland families are opening up their lives to Hopkins researchers seeking to determine how a combination of genetic and environmental factors might contribute to autism, even before birth. Baltimore Sun, Maryland.

[Beyond BPA: could 'BPA-free' products be just as unsafe?](#)

April 15, 2011

While U.S. federal policy supports alternatives to BPA and we're using products containing these new materials at increasing volume we actually know very little about them and lack a system that would provide independent assessment of new materials before they're in our homes. Atlantic Monthly.

[Stillbirths not dropping in rich countries; obesity may be to blame](#)

April 14, 2011

More than 2 million babies are stillborn every year worldwide and about half could be saved if their mothers had better medical care, a new study finds. While the vast majority of stillbirths happen in the developing world, the rates in many developed

countries have not dropped to the degree expected, as rising obesity levels among pregnant women increase the risk. Lancet.

[The toxicity panic](#)

April 11, 2011

The contemporary fear of plastics and other household menaces can't possibly be justified, or can it? The United States deals with potentially toxic household products in a manner that is so cavalier that it would, in a saner world, be called negligence. New Republic.

[Girls hit puberty earlier than ever](#)

April 11, 2011

Girls are maturing faster than ever and, for reasons doctors don't completely understand, hitting puberty younger than any generation in history. Most agree that several forces are at work, from obesity to hormone-like environmental chemicals. USA Today.

[Sludge sloughs off perfluorinated chemicals](#)

April 09, 2011

Farmers often add nutrients to their fields in the form of treated sewage sludge, also called biosolids. Environmental scientists worry that chemical contaminants in particular perfluorochemicals in these biosolids could leach into the soil and eventually enter groundwater. Chemical & Engineering News.

[Debate over the safety of best-selling herbicide](#)

April 09, 2011

Critics say it's a chemical that could cause infertility or cancer, while others see it speeding the growth of super weeds and causing worrying changes to plants and soil. Backers say it is safe and has made a big contribution to food production. It's glyphosate, the main ingredient in Roundup, a critical part of global food production. Reuters.

[Lessons from the past](#)

April 06, 2011

The Chernobyl disaster still has much to tell us about the long-term risks of low-level radiation exposure. But only if the necessary follow-up studies are supported. Nature.

[Possible link between prenatal Tylenol use and asthma](#)

April 05, 2011

Tylenol use during pregnancy may be a risk factor for development of asthma in children, a recent study published in the April issue of Clinical and Experimental Allergy Journal suggests. ABC Action News.

[Early births linked to highway proximity](#)

April 04, 2011

Women who live near freeways and highways are more likely to give birth prematurely, new research suggests. Australian Associated Press.

[Mercury pollution damages environment, public health](#)

April 03, 2011

The Environmental Protection Agency estimates that mercury pollution is so widespread that one in six women of childbearing age already has enough mercury in her blood to put her baby at risk, should she become pregnant. Joplin Globe, Missouri.

[Toxins in baby food might affect hormones](#)

April 03, 2011

Infant formula and solid baby food frequently contain fungus-derived hormones that have been shown to cause infertility in mammals, Italian researchers report. Reuters.

[Altering the male-female birth ratio](#)

April 02, 2011

One cannot rule out the possibility that the thousands of chemicals we have introduced into the environment during the last few decades are involved in the lower rate of male

births. Montreal Gazette, Quebec.

[Environmentalists say abnormal births linked to abuse of nature](#)

April 02, 2011

The births of two-headed and three-legged calves in two provinces of Armenia within the recent months raised an alarm among environmentalists that may also be supported by records. Armenia Now, Armenia.

Announcements & Grant Opportunities

A daily news feed with these announcements is now available on CHE's website:

<http://www.healthandenvironment.org/news/announce>.

[Request for Proposals: Developing High-throughput Assays for Predictive Modeling of Reproductive and Developmental Toxicity Modulated through the Endocrine System or Pertinent Pathways in Humans and Species Relevant to Ecological Risk Assessment](#)

Deadline: Thursday May 5, 2011

Sponsor: US Environmental Protection Agency EPA is seeking applications for research in development of high-throughput assays for use in analyzing chemicals or mixtures of chemicals to explain how exposure can be causally related to adverse, apical outcomes related to development and reproduction. These applications can address toxicity modulated by chemical effects on the endocrine system or via a variety of other pathways. Assay systems of interest are those relevant to humans and other species relevant to human health and/or ecological risk assessment. Potential funding per award is up to a total of \$1.2 million, including direct and indirect costs, with a maximum duration of three years.

Calendar of Events & Submission Deadlines

Online Calendar. *These and more upcoming events and abstract deadlines are listed in the [CHE-Fertility searchable calendar](#).*

[Conference: 6th Copenhagen Workshop on Endocrine Disrupters](#)

April 26-29, 2011

Copenhagen, Denmark

The field of endocrine disrupting chemicals (EDC) is continuously expanding as scientific evidence of new health effects of xenobiotics appears. EDCs effect the thyroid gland, pancreas, the nervous system, breast tissue, the prostate and the reproductive organs may be sensitive to EDC exposure. Additionally, the foetal basis of adult disease turns the focus towards the impact of EDCs exposure during vulnerable stages of development. The overall aim of the workshop is to improve our understanding of the role of EDCs for human health, and to share results, information, doubts and ideas.

[ENDO 2011: 93rd Annual Meeting & Expo](#)

June 4-7, 2011

Boston, Massachusetts

Sponsor: The Endocrine Society

Whether you are a researcher or a practitioner, in-training or established, ENDO 2011 has offerings for everyone. ENDO 2011 is the ideal venue to learn and present the best and latest endocrine science, exchange ideas, and network with more than 7,000 endocrine researchers and practitioners. Deadline for early registration discount is April 5, 2011.

[Conference: 75th Annual Educational Conference & Exhibition](#)

June 15-18, 2011

Sponsor: National Environmental Health Association

The conference is designed to educate and inform people who have an interest or career in environmental health and protection, as well as to build a professional network of environmental health colleagues, exchange information, and discover new and practical solutions to environmental health issues.

[Conference/Seminar: 2011 National Healthy Homes Conference](#)

June 20-23, 2011

Denver, Colorado

Sponsor: US Department of Housing and Urban Development

This year's theme, "Leading the Nation to Healthy Homes, Families, and Communities," reflects the growing demand for building and sustaining housing and communities that are healthy, safe and green for America's families. The conference will offer over 100 educational sessions covering eight topic areas.

[Conference: 6th International Conference on the Impact of Environmental Factors on Health](#)

July 25-27, 2011

Riga, Latvia

Sponsor: Wessex Institute of Technology and the Journal of Safety and Security Engineering. Health problems related to the environment have become a major source of concern all over the world. The health of the population depends upon good quality environmental factors including air, water, soil, food and many others. The interaction between environmental risk and health is often complex and can involve a variety of social, occupational and lifestyle factors. This emphasises the importance of considering an interdisciplinary approach.

[Conference: Reproductive Health 2011](#)

September 15-17, 2011

Las Vegas, Nevada

Sponsor: Association of Reproductive Health Professionals

This clinical conference combines the latest research science with interactive, hands-on training and offers take home points for immediate practice improvement. This year's conference includes a module on environmental health. The program content is developed by leading experts in the field with a focus on evidence-based education that can be directly applied to practice change.

[Conference: American Society of Reproductive Medicine](#)

October 15-19, 2011

Orlando, Florida

Sponsor: American Society of Reproductive Medicine

The 67th Annual Meeting of ASRM will explore the theme of Realizing Scientific Dreams. ASRM is a non-profit organization whose members demonstrate the high ethical principles of the medical profession, and evince an interest in infertility, reproductive medicine and biology.

[Conference: World Congress on Controversies in Obstetrics, Gynecology & Infertility \(COGI\)](#)

November 17-20, 2011

Paris, France

The groundbreaking series of COGI Congresses provide a unique platform to discuss controversial issues in all fields of Obstetrics, Gynecology and Infertility. The ability to discuss only controversial topics with emphasis on clinical solutions in cases where no agreed-upon answers or consensus exist, provides clinicians with an insight and a take-home message that ameliorates treatment in the most difficult situations.

The Collaborative on Health and the Environment offers this information as a service but does not endorse any of the events, articles or announcements.

Please email Karin Russ, CHE's Fertility/Reproductive Health Working Group Coordinator,

at karin@healthandenvironment.org with any questions, comments, or suggestions.

If you would like to join the Collaborative on Health and the Environment (CHE) and the Fertility/Reproductive Health Working Group, please complete the application on the CHE website: <http://www.healthandenvironment.org/application>. Joining CHE means receiving up to four email messages a month from the CHE National listserv. CHE costs nothing to join and the benefit is shared information and opportunities for further engagement, if you choose. Be sure to mark that you want to join the CHE Fertility/Reproductive Health Working Group at the bottom of the application.

Karin Russ
Collaborative on Health and the Environment

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